Derrick
Engineering, Inc.
Consulting Engineers

A.I.# 1559

September 17, 2008

Mrs. Vickie L. Prather, Acting Supervisor
Inventory & Data Management Section
Frankfort Office Park
14 Reilly Road
Frankfort, Kentucky 40601

Re: KPDES No. KY0090590
Clarkson, Kentucky Wastewater Treatment Plant
Grayson County, Kentucky

Dear Mrs. Prather:

Enclosed are Permit Applications (Form 1 & A) as required by your letter to Mayor Bonnie Henderson dated July 30, 2008 requiring the City of Clarkson, Kentucky to file for a renewal of their KPDES Permit with will expire July 31, 2009 for the Clarkson, Kentucky Wastewater Treatment Plant.

Please review the enclosed information and if you have any questions or need additional information please call David Derrick or George Just at 502-636-9273 or Fax 502-636-9274 or E-mail derrickinc@bellsouth.net.

Very truly yours,
Derrick Engineering, Inc.

George Just

George Just, CET

cc: Bonnie Henderson, Mayor

File Re. #152001

KPDES FORM 1

AI# 1559

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- ☐ Apply for a new permit.
- ☒ Apply for reissuance of expiring permit.
- ☐ Apply for a construction permit.
- ☐ Modify an existing permit.
  Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:
Form A, Form B, Form C, Form F, or Form SC

For additional information contact:
KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION	AGENCY USE	0	0	9	0	5	9	0

A. Name of Business, Municipality, Company, Etc. Requesting Permit
City of Clarkson, KY

B. Facility Name and Location	C. Primary Mailing Address (all facility correspondence will be sent to this address). **Include owner's mailing address (if different) in D.**
Facility Location Name: Clarkson WWTP	Facility Contact Name and Title: Mr. ☐ Ms. ☒ Bonnie Henderson, Mayor
Facility Location Address (i.e. street, road, etc., **not P.O. Box**): Spring Street	Mailing Address: 106 Spring Street
Facility Location City, State, Zip Code: Clarkson, KY 42726	Mailing City, State, Zip Code: Clarkson, KY 42726
D. Owner's name (if not the same as in part A and C):	Facility Contact Telephone Number: 270-242-6997
Owner's Mailing Address:	Owner's Telephone Number (if different):

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: Collection, Transportation and Discharge of Wastewater for the City of Clarkson, Kentucky

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code & Description:	N/A P.O.T.W. involved with the collection and treatment of wastewater		
Other SIC Codes:	4952 Sewerage Systems		

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)

B. County where facility is located: Grayson	City where facility is located (if applicable):
C. Body of water receiving discharge: Barton Run	
D. Facility Site Latitude (degrees, minutes, seconds): 37 D 29' 22"	Facility Site Longitude (degrees, minutes, seconds): 86 D 12' 39"
E. Method used to obtain latitude & longitude (see instructions):	Topo Map USGS
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	

IV. OWNER/OPERATOR INFORMATION

A. Type of Ownership:
☒ Publicly Owned ☐ Privately Owned ☐ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator:	Telephone Number:
Leslie N. Harrison	270-242-6997
Operator Mailing Address (Street): 106 Spring Street	
Operator Mailing Address (City, State, Zip Code): Clarkson, Kentucky 42726	
Is the operator also the owner? Yes ☐ No ☒	Is the operator certified? If yes, list certification class and number below. Yes ☒ No ☐
Certification Class: Class I	Certification Number: 14427

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number:	Issue Date of Current Permit:	Expiration Date of Current Permit:
0090590	12-3-2004	7-31-2009
Number of Times Permit Reissued:	Date of Original Permit Issuance:	Sludge Disposal Permit Number:
	December 1989	N/A
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit Number(s):	

Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source		
Solid or Special Waste		
Hazardous Waste - Registration or Permit		

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). Information in this section serves to specifically identify the name and telephone number of the DMR official and the DMR mailing address (if different from the primary mailing address in Section I.C).

A. DMR Official (i.e., the department, office or individual designated as responsible for submitting DMR forms to the Division of Water):	City of Clarkson
DMR Official Telephone Number:	

B. DMR Mailing Address:
- Address the Division of Water will use to mail DMR forms (if different from mailing address in Section I.C), or
- Contact address if another individual, company, laboratory, etc. completes DMRs for you; e.g., contract laboratory address.

DMR Mailing Name:	McCoy & McCoy
DMR Mailing Address:	P.O. Box 907
DMR Mailing City, State, Zip Code:	Madisonville, Kentucky 42431

VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount (for permit renewals, please include the KPDES permit number on the check to ensure proper crediting). Descriptions of the base fee amounts are given in the "General Instructions."

Facility Fee Category:	Filing Fee Enclosed:
Public Owned Treatment Works (No Fee Due)	N/A

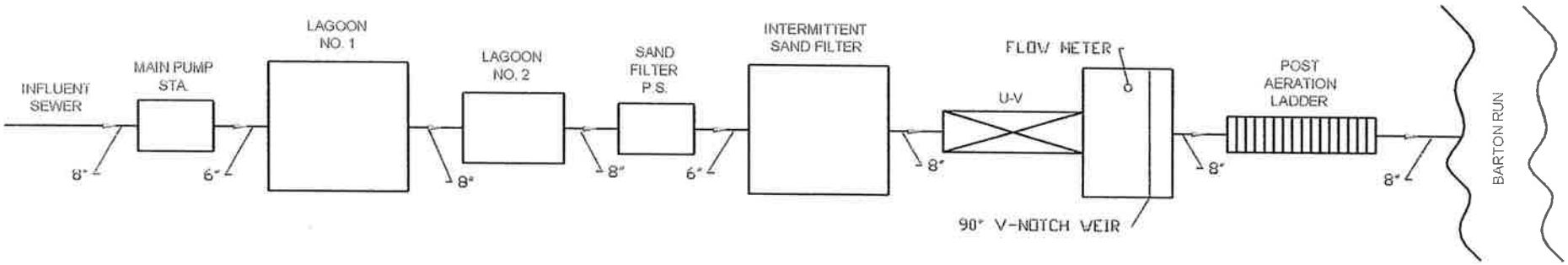
VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Mr. ☐ Ms. ☒ Bonnie Henderson, Mayor	270-242-6997
SIGNATURE x Bonnie D. Henderson	DATE: x 09-11-08

Return completed application form and attachments to: **KPDES Branch, Division of Water, Frankfort Office Park, 14 Reilly Road, Frankfort, KY 40601. Direct questions to: KPDES Branch at (502) 564-3410.**

SCHEMATIC FLOW DIAGRAM
CLARKSON, KENTUCKY 45,000 GPD WWTP
LAGOONS
KPDES KY 0090590



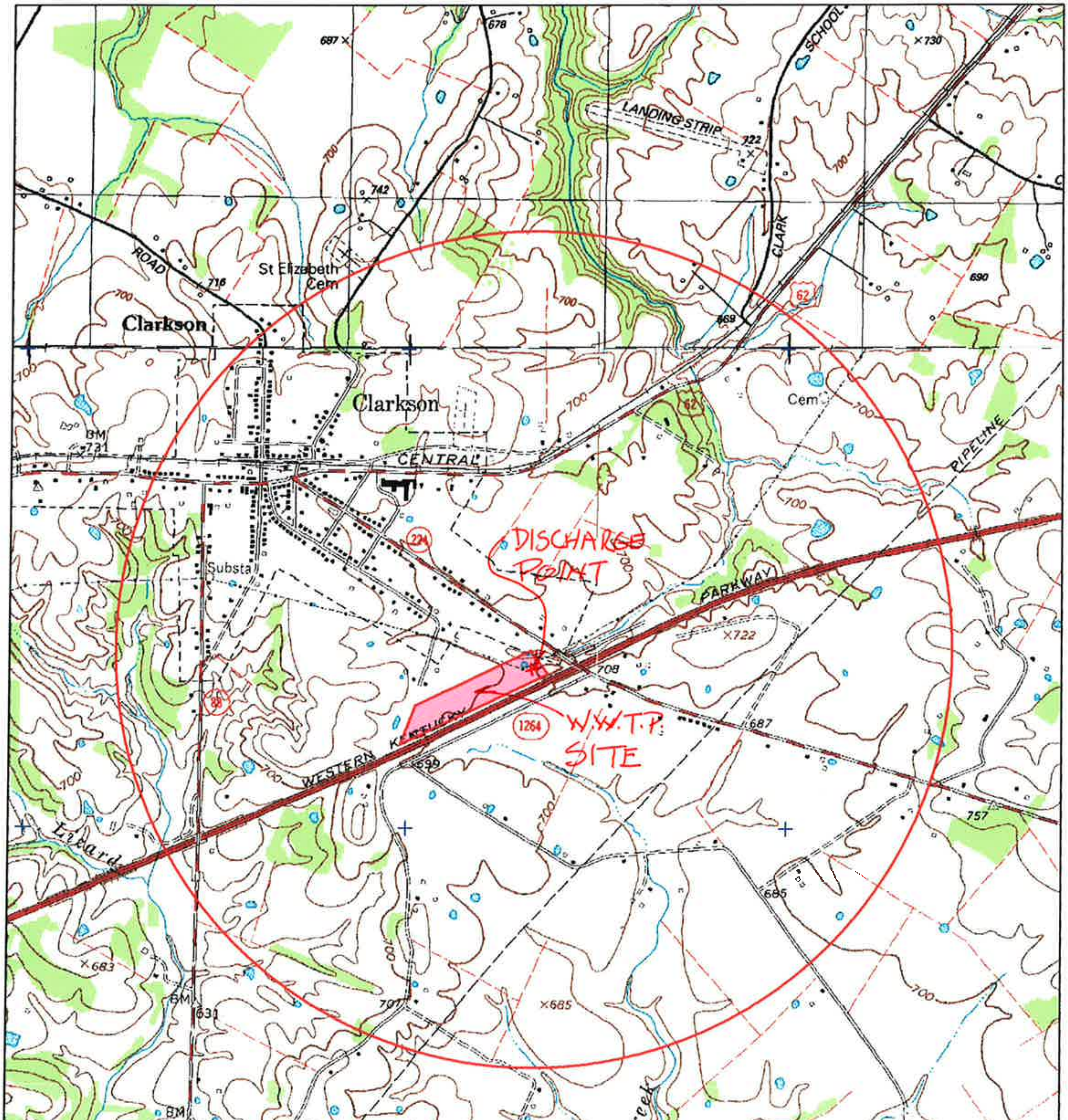
DERRICK ENGINEERING, INC.
1397 SOUTH THIRD STREET
LOUISVILLE, KY 40208

9-08

#152

Process Flow Schematic Narrative Description
Clarkson, Kentucky
WWTP Lagoons
KY 0090590
Outfall 001

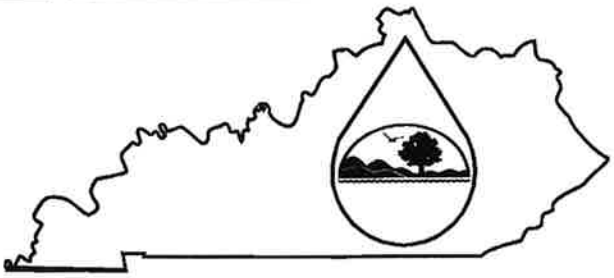
Wastewater enters the main pump station through an 8" gravity sewer and then is pumped through a 6" FM to a 5 acre lagoon No. 1, after passing through lagoon No. 1 the flow then passes through a 1 acre lagoon No. 2, after passing through lagoon No. 2 the flow than passes to a sand filter pump station where it is pumped to a intermittent sand filter, after leaving the sand filter the flow pass through a U-V disinfection system after leaving the U-V system, the flow is measured and recorded, the flow than go to an aeration ladder than discharged to Barton Run.



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 850 ft Scale: 1 : 20,800 Detail: 13-0 Datum: WGS84

KPDES FORM A

AI 1559



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch (502) 564-3410.

APPLICATION OVERVIEW	AGENCY USE	0	0	9	0	5	9	0

Form A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form A you must complete.

BASIC APPLICATION INFORMATION:

A. Basic Application Information for all Applicants. All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd. All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. Certification. All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. Expanded Effluent Testing Data. A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. Toxicity Testing Data. A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. Industrial User Discharges and RCRA/CERCLA Wastes. A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
   b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designated as an SIU by the control authority.

G. Combined Sewer Systems. A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: Clarkson Wastewater Treatment Plant

Mailing Address: 106 Spring Street
Clarkson, Kentucky 42726

Contact person: Ms. Bonnie Henderson

Title: Mayor

Telephone number: 270-242-6997

Facility Address: 106 Spring Sreet

(not P.O. Box): Clarkson, Kentucky 42726

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

Is the applicant the owner or operator (or both) of the treatment works?

x owner X operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

_____ facility X Applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES	0090590	PSD	
UIC		Other	
RCRA		Other	

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
City of Clarkson	764	Separate	Municipal
Total population served	764		

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

_____ Yes _X_ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

_____ Yes _X_ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 0.045 mgd

	2006 Two Years Ago	2007 Last Year	2008 This Year	
b. Annual average daily flow rate	0.028	0.010	0.017	mgd
c. Maximum daily flow rate	0.036	0.046	0.046	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

X Separate sanitary sewer 100 %

_____ Combined storm and sanitary sewer _____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? _X_ Yes _____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent ONE

ii. Discharges of untreated or partially treated effluent N/A

iii. Combined sewer overflow points N/A

iv. Constructed emergency overflows (prior to the headworks) N/A

v. Other _____ N/A

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? _____ Yes X No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

c. Does the treatment works land-apply treated wastewater? _____ Yes _X_ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? _____ Yes X No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

N/A

If transport is by a party other than the applicant, provide:

Transporter name: N/A

Mailing Address:

Contact person:

Title:

Telephone number:

For each treatment works that receives this discharge, provide the following:

Name: N/A

Mailing Address:

Contact person:

Title:

Telephone number:

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility. mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? ____ Yes X No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method:

Is disposal through this method ____ continuous or ____ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number 001

b. Location

City of Clarkson, KY (City or town, if applicable) — 42726 (Zip Code)

Grayson (County) — Kentucky (State)

37 degrees, 29', 22" (Latitude) — 86 degrees, 12', 39" (Longitude)

c. Distance from shore (if applicable) N/A ft.

d. Depth below surface (if applicable) N/A ft.

e. Average daily flow rate 0.045 mgd

f. Does this outfall have either an intermittent or a periodic discharge? ____ Yes X No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: ____

Average duration of each discharge: ____

Average flow per discharge: ____ mgd

Months in which discharge occurs: ____

g. Is outfall equipped with a diffuser? ____ Yes X No

A.10. Description of Receiving Waters.

a. Name of receiving water Barton Run

b. Name of watershed (if known) ____

United States Soil Conservation Service 14-digit watershed code (if known): ____

c. Name of State Management/River Basin (if known): ____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): ____

d. Critical low flow of receiving stream (if applicable):

acute ____ cfs chronic ____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): ____ mg/l of $CaCO_3$

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

_____ Primary _X_ Secondary

_____ Advanced _____ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal 85 %

Design SS removal 85 %

Design P removal _____ %

Design N removal _____ %

Other _____ _____ %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.
U-V Disinfection

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes _X_ No

d. Does the treatment plant have post aeration? _X_ Yes _____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.2	s.u.			
pH (Maximum)	7.9	s.u.			
Flow Rate	0.036	MGD	0.017	MGD	All Year
Temperature (Winter)	0	C			3/31
Temperature (Summer)	25	C			3/31

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5							
DEMAND (Report one)	CBOD-5	10	Mg l	10	Mg/l			
FECAL COLIFORM		36	N/100	36	N/100			
TOTAL SUSPENDED SOLIDS (TSS)		16.6	Mg/l	16.6	Mg/l			

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM A YOU MUST COMPLETE

Form "A"

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

_____ Primary X Secondary

_____ Advanced _____ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	85	%
Design SS removal	85	%
Design P removal		%
Design N removal		%
Other _____		%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.
U-V Disinfection

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes X No

d. Does the treatment plant have post aeration? X Yes _____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	7.2	s.u.			
pH (Maximum)	7.9	s.u.			
Flow Rate	0.036	MGD	0.017	MGD	~~21~~ All year
Temperature (Winter)	0	C			~~3/31~~ 3/31 OK
Temperature (Summer)	25	C			~~3/31~~ 3/31

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5							
DEMAND (Report one)	CBOD-5	10	Mg l	10	Mg/l			
FECAL COLIFORM		36	N/100	36	N/100			
TOTAL SUSPENDED SOLIDS (TSS)		16.6	Mg/l	16.6	Mg/l			

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

_____gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

_____

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____Yes ____No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

_____

b. Indicate whether the planned improvements or implementation schedule are required by local, **State**, or Federal agencies.

____Yes ____No

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

	Schedule	Actual Completion
Implementation Stage	MM / DD / YYYY	MM / DD / YYYY
– Begin construction		__/__/____
– End construction		__/__/____
– Begin discharge		__/__/____
– Attain operational level		__/__/____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ____Yes ____No

Describe briefly: _____

_____

B.6. EFFLUENT TESTING DATA (GREATER THAN O.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number:_____

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER:							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM A YOU MUST COMPLETE

Form "2"

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

__X__ Basic Application Information packet

Supplemental Application Information packet:

_____ Part D (Expanded Effluent Testing Data)

_____ Part E (Toxicity Testing: Biomonitoring Data)

_____ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

_____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Ms. Bonnie Henderson, Mayor

Signature: x Bonnie D. Henderson

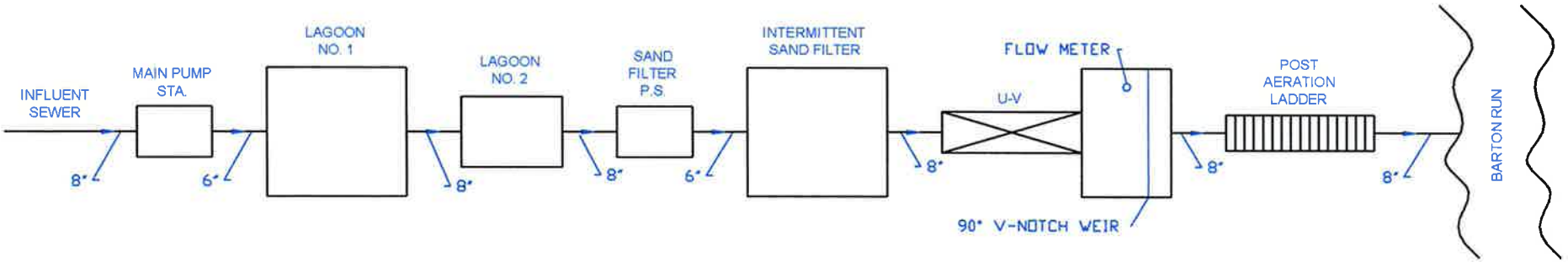
Telephone number: 270-242-6997

Date signed: x 09-11-08

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

SCHEMATIC FLOW DIAGRAM
CLARKSON, KENTUCKY 45,000 GPD WWTP
LAGOONS
KPDES KY 0090590



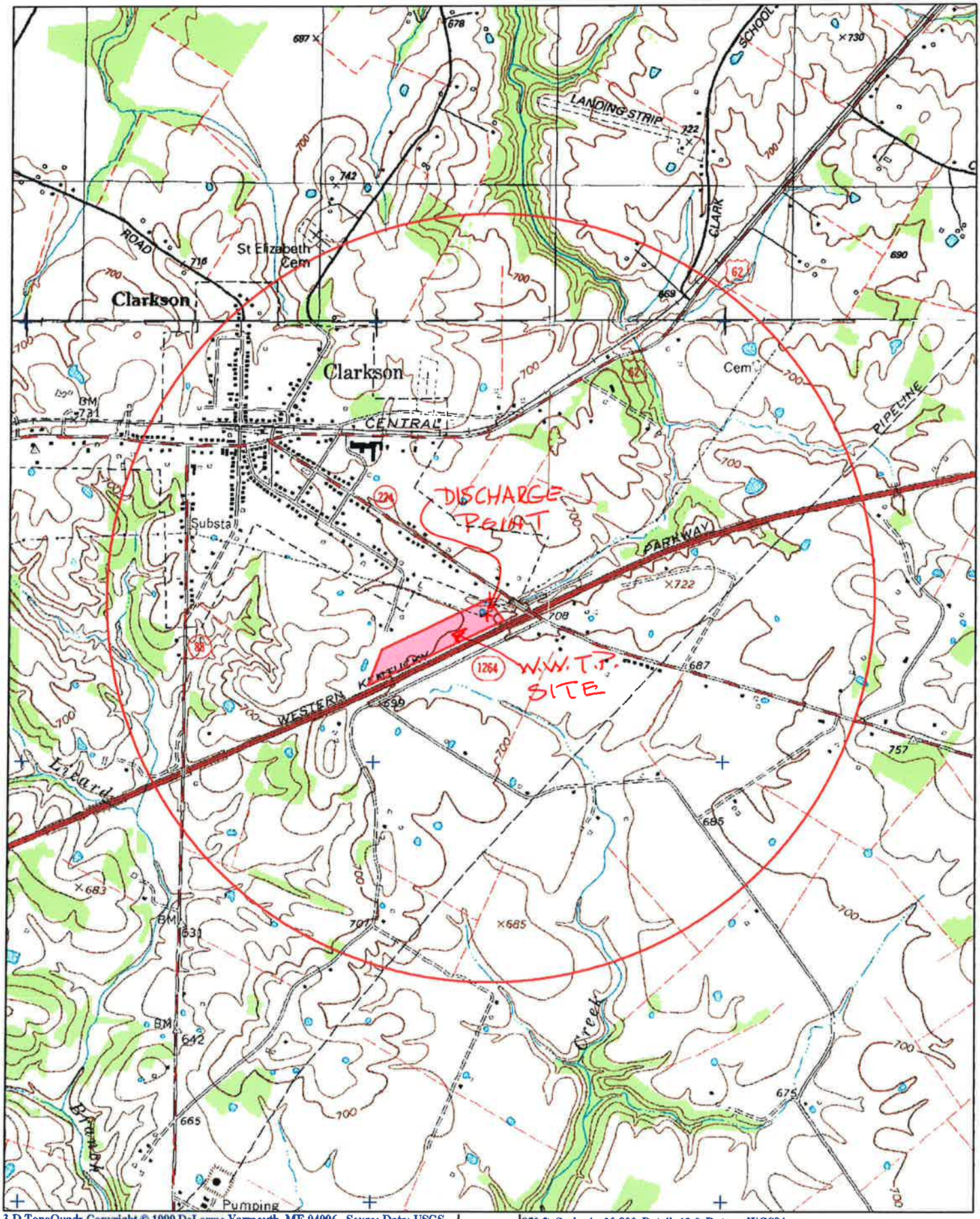
DERRICK ENGINEERING, INC.
1397 SOUTH THIRD STREET
LOUISVILLE, KY 40208

9-08

#152

Process Flow Schematic Narrative Description
Clarkson, Kentucky
WWTP Lagoons
KY 0090590
Outfall 001

Wastewater enters the main pump station through an 8" gravity sewer and then is pumped through a 6" FM to a 5 acre lagoon No. 1, after passing through lagoon No. 1 the flow then passes through a 1 acre lagoon No. 2, after passing through lagoon No. 2 the flow than passes to a sand filter pump station where it is pumped to a intermittent sand filter, after leaving the sand filter the flow pass through a U-V disinfection system after leaving the U-V system, the flow is measured and recorded, the flow than go to an aeration ladder than discharged to Barton Run.



850 ft Scale: 1 : 20,800 Detail: 13-0 Datum: WGS84

EFFLUENT

KY0090590
KPDES
CLARKSON STP
PLANT NAME
JAN-DEC 2008
REPORTING PERIOD

0

0.045
BASE FLOW DATA

PERMIT EXPIRATION DATE

LEASE NAME & DOW #

MONTH	AVG. FLOW MGD	PEAK DAY MGD	AMMONIA NITROGEN MG/L AVG	X	AMMONIA NITROGEN MG/L MAX	X	TOTAL SOLIDS MG/L SOLIDS MG/L AVG	X	TOTAL SUSPENDED SOLIDS MG/L MAX	X	pH MIN	X	pH MAX	X	DISSOLVED OXYGEN MIN	X	TOTAL CHLORINE RESIDUAL MAX	X	FECAL COLIFORM AVG	X	FECAL COLIFORM MAX	X	CARBONACEOUS BOD AVG	X	CARBONACEOUS BOD MAX	X	EXCEEDS
JAN	0.038	0.038	11.0	0	11.0	0	16.0	0	16.0	0	7.5	0	7.5	0	14.0	0	0	0	120	0	120	0	11	0	11	0	0
FEB	0.046	0.046	8.0	0	8.0	0	46.0	1	46.0	1	7.3	0	7.3	0	12.0	0	0	0	<10	0	<10	0	30	0	30	0	0
MAR	0.001	0.001	5.0	0	5.0	0	21.0	0	21.0	0	7.3	0	7.3	0	10.0	0	0	0	50	0	50	0	9	0	9	0	0
APR	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
MAY	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
JUN				0		0		0		0		0		0		0	0	0		0		0		0		0	0
JUL				0		0		0		0		0		0		0	0	0		0		0		0		0	0
AUG				0		0		0		0		0		0		0	0	0		0		0		0		0	0
SEP				0		0		0		0		0		0		0	0	0		0		0		0		0	0
OCT				0		0		0		0		0		0		0	0	0		0		0		0		0	0
NOV				0		0		0		0		0		0		0	0	0		0		0		0		0	0
DEC				0		0		0		0		0		0		0	0	0		0		0		0		0	0
TOTAL																	0										
AVG																											

.017 .017 4.8 4.8 16.6 16.6 4.4 4.4 7.2 36 36 10 10

EFFLUENT

KY0090590
KPDES
CLARKSON STP [0]
PLANT NAME
JAN-DEC 2007
REPORTING PERIOD

0.045
BASE FLOW DATA

PERMIT EXPIRATION DATE

LEASE NAME & DOW #

MONTH	AVG. FLOW MGD	PEAK DAY MGD	AMMONIA NITROGEN MG/L AVG	X	AMMONIA NITROGEN MG/L MAX	X	TOTAL SOLIDS MG/L SOLIDS MG/L AVG	X	TOTAL SUSPENDED SOLIDS MG/L MAX	X	pH MIN	X	pH MAX	X	DISSOLVED OXYGEN MIN	X	TOTAL CHLORINE RESIDUAL MAX	X	FECAL COLIFORM AVG	X	FECAL COLIFORM MAX	X	CARBONACEOUS BOD AVG	X	CARBONACEOUS BOD MAX	X	EXCEEDS
JAN	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
FEB	0.000	0.000	12.0	0	12.0	0	12.0	0	12.0	0	7.5	0	7.5	0	13.0	0	0	0	20	0	20	0	10	0	10	0	0
MAR	0.041	0.041	2.8	0	2.8	0	46.0	1	46.0	1	7.5	0	7.5	0	11.0	0	0	0	210	1	210	0	9	0	9	0	3
APR	0.041	0.041	6.0	0	6.0	0	41.0	1	41.0	0	7.6	0	7.6	0	8.6	0	0	0	<10	0	<10	0	14	0	14	0	1
MAY	0.036	0.036	12.0	0	12.0	1	33.0	1	33.0	0	7.3	0	7.3	0	8.0	0	0	0	510	1	510	1	6	0	6	0	4
JUN	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
JUL	0.038	0.038	10.0	1	10.0	1	26.0	0	26.0	0	7.2	0	7.2	0	7.4	0	0	0	10	0	10	0	9	0	9	0	2
AUG	0.036	0.036	31.0	0	31.0	1	40.0	1	40.0	0	7.4	0	7.4	0	7.0	0	0	0	<10	0	<10	0	7	0	7	0	2
SEP	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
OCT	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
NOV	0.001	0.001	6.0	1	6.0	0	8.0	0	8.0	0	7.5	0	7.5	0	9.0	0	0	0	50	0	50	0	4	0	4	0	1
DEC	0.046	0.046	15.0	1	15	0	27.0	0	27.0	0	7.7	0	7.7	0	11.0	0	0	0	>600	0	>600	0	25	0	25	0	1
TOTAL																	0										
AVG																											

0.10 0.10 7.9 7.9 19.4 19.4 5.0 5.0 5.5 118 118 7.0 7.0

EFFLUENT

KY0090590
KPDES
CLARKSON STP
PLANT NAME
JAN-DEC 2006
REPORTING PERIOD

0

0.045
BASE FLOW DATA

PERMIT EXPIRATION DATE

LEASE NAME & DOW #

MONTH	AVG. FLOW MGD	PEAK DAY MGD	AMMONIA NITROGEN MG/L AVG	X	AMMONIA NITROGEN MG/L MAX	X	TOTAL SOLIDS MG/L SOLIDS MG/L AVG	X	TOTAL SUSPENDED SOLIDS MG/L MAX	X	pH MIN	X	pH MAX	X	DISSOLVED OXYGEN MIN	X	TOTAL CHLORINE RESIDUAL MAX	X	FECAL COLIFORM AVG	X	FECAL COLIFORM MAX	X	CARBONACEOUS BOD AVG	X	CARBONACEOUS BOD MAX	X	EXCEEDS
JAN	0.030	0.030	15.0	0	15.0	0	14.0	0	14.0	0	7.4	0	7.4	0	8.6	0	0	0	600	0	600	1	2	0	2	0	1
FEB	0.031	0.031	9.0	0	9.0	0	23.0	0	23.0	0	7.8	0	7.8	0	8.4	0	0	0	<10	0	<10	0	53	1	53	0	0
MAR	0.033	0.033	5.0	0	5.0	0	18.0	0	18.0	0	7.2	0	7.2	0	8.2	0	0	0	<10	0	<10	0	5	0	5	0	0
APR	0.034	0.034	7.0	0	7.0	0	15.0	0	15.0	0	7.8	0	7.8	0	7.4	0	0	0	270	1	270	0	10	0	10	0	1
MAY	0.034	0.034	6.0	0	6.0	0	8.0	0	8.0	0	7.4	0	7.4	0	7.6	0	0	0	190	0	190	0	3	0	3	0	0
JUN	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
JUL	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
AUG	0.034	0.034	9.0	0	9.0	1	50.0	1	50.0	1	7.8	0	7.8	0	7.6	0	0	0	<10	0	<10	0	15	0	15	0	3
SEP	0.032	0.032	30.0	1	30.0	1	17.0	0	17.0	0	7.6	0	7.6	0	7.2	0	0	0	<10	0	<10	0	3	0	3	0	2
OCT	0.034	0.034	12.0	1	12.0	1	12.0	0	12.0	0	7.4	0	7.4	0	8.2	0	0	0	10	0	10	0	4	0	4	0	2
NOV	0.036	0.036	7.0	1	7.0	0	11.0	0	11.0	0	7.9	0	7.9	0	7.8	0	0	0	<10	0	<10	0	<2	0	<2	0	1
DEC	0.036	0.036	16.0	1	16	1	11.0	0	11.0	0	7.2	0	7.2	0	11.0	0	0	0	10	0	10	0	6	0	6	0	2
TOTAL																	0										
AVG																											

0.028 0.028 9.7 9.7 14.9 14.9 6.3 6.3 6.8 94.2 94.2 8.4 8.4

EFFLUENT

KY0090590
KPDES
CLARKSON STP 0
PLANT NAME
JAN-DEC 2005
REPORTING PERIOD

0.045
BASE FLOW DATA

PERMIT EXPIRATION DATE

LEASE NAME & DOW #

MONTH	AVG. FLOW MGD	PEAK DAY MGD	AMMONIA NITROGEN MG/L AVG	X	AMMONIA NITROGEN MG/L MAX	X	TOTAL SOLIDS MG/L SOLIDS MG/L AVG	X	TOTAL SUSPENDED SOLIDS MG/L MAX	X	pH MIN	X	pH MAX	X	DISSOLVED OXYGEN MIN	X	TOTAL CHLORINE RESIDUAL MAX	X	FECAL COLIFORM AVG	X	FECAL COLIFORM MAX	X	CARBONACEOUS BOD AVG	X	CARBONACEOUS BOD MAX	X	EXCEEDS
JAN	0.043	0.043	4.2	0	4.2	0	10.0	0	10.0	0	7.3	0	7.3	0	10.0	0	0	0	10	0	10	0	5	0	5	0	0
FEB	0.041	0.041	7.1	0	7.1	0	18.0	0	18.0	0	7.6	0	7.6	0	10.0	0	0	0	10	0	10	0	5	0	5	0	0
MAR	0.040	0.040	6.6	0	6.6	0	22.0	0	22.0	0	7.4	0	7.4	0	8.6	0	0	0	10	0	10	0	4	0	4	0	0
APR	0.440	0.440	1.4	0	1.4	0	51.0	1	51.0	1	7.6	0	7.6	0	8.2	0	0	0	245	1	460	1	35	1	35	0	5
MAY	0.038	0.038	<1.0	0	<1.0	0	53.0	1	53.0	1	7.7	0	7.7	0	8.2	0	0	0	<10	0	<10	0	28	0	28	0	2
JUN	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
JUL	0.000	0.000	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0
AUG	0.030	0.030	0.0	0	0.0	0	19.0	0	19.0	0	7.6	0	7.6	0	8.8	0	0	0	10	0	10	0	8	0	8	0	0
SEP	0.037	0.037	7.4	1	7.4	1	17.0	0	17.0	0	7.9	0	7.9	0	7.4	0	0	0	10	0	10	0	6	0	6	0	2
OCT	0.034	0.034	6.3	1	6.3	1	24.0	0	24.0	0	7.9	0	7.9	0	6.2	1	0	0	590	1	590	1	33	0	33	0	5
NOV	0.039	0.039	9.4	1	9.4	0	18.0	0	18.0	0	7.8	0	7.9	0	7.3	0	0	0	70	0	70	0	30	0	30	0	1
DEC	0.036	0.036	15.0	1	15	0	10.0	0	10.0	0	7.5	0	7.5	0	7.8	0	0	0	<10	0	<10	0	20	0	20	0	1
TOTAL																	0										
AVG																											

0.065 0.065 4.9 4.9 20.2 20.2 6.4 6.4 6.9 81.3 81.3 14.5 14.5

CLARKSON QUADRANGLE